

PCC[®]-130

The Crown[®] PCC[®]-130 is a surface-mounted small cardioid microphone of professional quality. This handsomely styled unit is appropriate for use on the most elegant boardroom table or lectern. Other applications include churches, courtrooms and teleconferencing.

With its small size, the PCC-130 is less conspicuous on a conference table than comparable mics. Because of its highly directional pickup pattern, the PCC-130 minimizes background noise and feedback.

The microphone uses the principle of phase coherency achieved by mounting a small-diameter mic capsule very near a boundary. Direct and reflected sound waves arrive at the mic in-phase, and add coherently. This enhances sensitivity, clarity and reach.

Self-contained electronics eliminate the need for an in-line power module. Powered by 12-48V phantom power, the PCC-130 has a low-impedance balanced output which permits long cable runs without hum pickup or high-frequency loss. Included with each PCC-130 is a 15-foot (4.6-m), two-conductor shielded microphone cable with a TA3F connector (mic end) and 3-pin male XLR-type connector (output). Although the standard connector on the microphone is a Switchcraft TB3M, the microphone can be special-ordered with a 1/4-inch stereo phone plug on the bottom of the base plate as the PCC-130SPP.

Capable of withstanding up to 120 dB SPL without distortion, the PCC-130 will never overload in practical use. Its electret-condenser capsule provides a wide, smooth frequency response from 50 Hz to 20 kHz. RFI suppression is included. Self-noise is low and sensitivity is very high. A bass-tilt switch allows the user to tailor the low-end response for particular applications.

Permanent mounting is enabled by screw holes in the base. Engineering attention-to-detail has assured years of reliable use from this trouble-free microphone.

The bottom of the microphone features a three-position BASS-TILT switch: FLAT, CUT, and BOOST. Low-frequency response is adjustable as shown in Fig. 1.

Installation

Typical placement for each microphone is at arm's length from the user. Either place one microphone in front of each person or one between every two people. The front of the microphone is indicated by an arrow on the bottom of the base plate.

PHASE COHERENT CARDIOID MICROPHONE



Features

- Ideal for boardroom tables, lecterns, churches, courtrooms and teleconferencing
- Small and inconspicuous
- Cardioid pattern reduces background noise and feedback
- Prevents phase interference due to table sound reflections
- Three-position bass-tilt switch

Specifications

Type: Phase Coherent Cardioid[®].

Element: Electret condenser.

Frequency response (typical): 50 Hz to 20,000 Hz at 30 degrees incidence to surface (see Fig. 1).

Polar pattern: Half-cardioid (cardioid in the hemisphere above the mounting surface). See Figs. 2 and 3.

Impedance: 150 ohms nominal (85 ohms actual), balanced, (recommended load impedance 1000 ohms or greater).

Open circuit sensitivity (typical): 22 mV/Pa* (-33 dB re 1 volt/Pa).

Power sensitivity: -30.5 dB re 1 mW/Pa*. EIA rating -125 dBm.

Equivalent noise level (self-noise): 22 dB SPL typical (0 dB = .0002 dyne/cm²), A-weighted.

S/N ratio: 72 dB at 94 dB SPL.

Maximum SPL: 120 dB SPL produces 3% THD.

Polarity: Positive pressure on the diaphragm produces positive voltage on pin 2 with respect to pin 3.

Operating voltage: Phantom power, 12 to 48 volts DC on pins 2 and 3 with respect to pin 1.

Current drain: 4 mA nominal.

Safe operating temperature range: -10° to +50° C, or +14° to +122° F.

Connector: Switchcraft TB3M in model PCC-130. Bottom-mounted 1/4-inch stereo phone plug in model PCC-130SPP. See Fig. 4.

Cable: 15-foot, black, two-conductor shielded cable with Switchcraft TA3F and A3M connectors. No cable supplied with SPP option.

Switch: Slide switch for bass cut, bass boost, or flat.

Materials: High-impact molded plastic and steel mesh grille.

Finish: Satin black.

Net weight: 3.5 oz. (99 g). Mic and cable: 9.5 oz. (269 g).

Dimensions: See Fig. 5.

Optional accessories: Crown PH-1A phantom power supply (single channel, battery or AC adapter powered).

*1 pascal = 10 dynes/cm² = 10 microbars = 94 dB SPL.

Fig. 1 Frequency Response

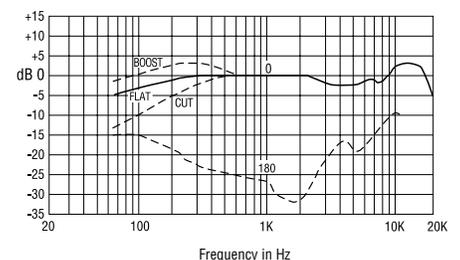


Fig. 2 Vertical-Plane Polar Response

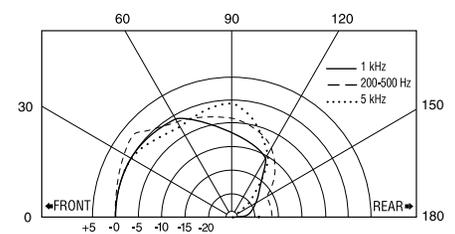
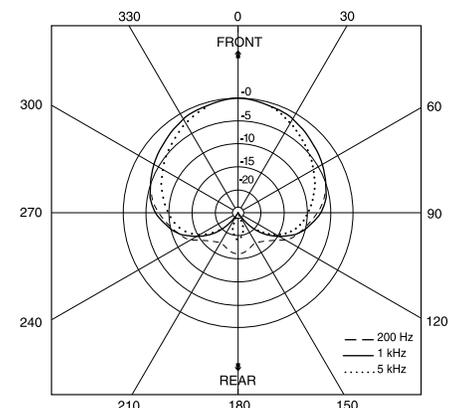


Fig. 3 Horizontal-Plane Polar Response





INSTALLED

PCC-130

Fig. 4

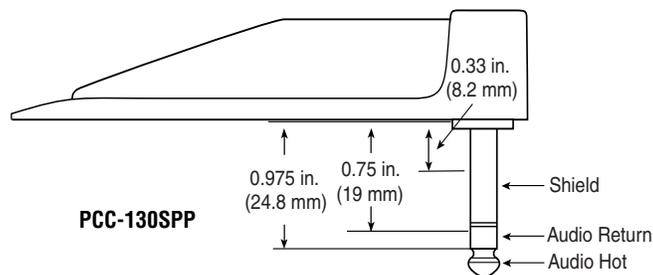
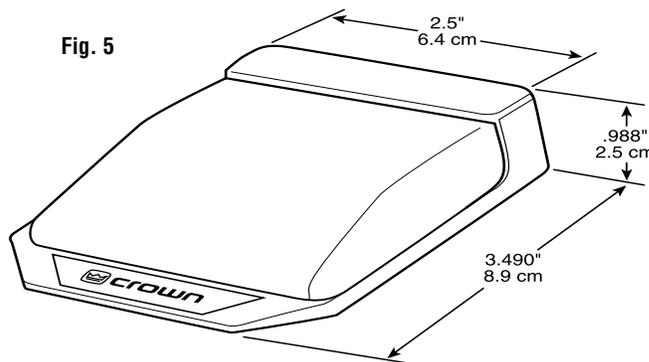


Fig. 5

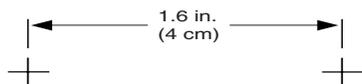


If the microphone is used on a lectern, place it on an open surface, not in a cavity. Otherwise the frequency response and polar pattern will be degraded. Set BASS-TILT to BOOST.

The PCC includes two keyhole slots in its base to accept mounting screws for permanent mounting. To screw the PCC to a table top, follow this procedure:

1. Punch out the keyholes marked on the label underneath the base plate (use a razor blade, small screwdriver, etc.).
2. Using the template below (Fig. 6), mark the location of two holes in the table where you want to mount the mic. These holes are 1.6 inch (4 cm) apart, center-to-center. They are 1.56 inches (3.96 cm) from the rear of the mic.
3. Screw two #8 woodscrews (0.27-in. or 7-mm diameter head) into the table at the locations you marked.

Fig. 6



Architects' and Engineers' Specifications

The microphone shall be the Crown Model PCC-130. The microphone shall be a half-cardioid electret condenser type, utilizing a subminiature transducer of rugged construction.

The microphone shall employ the principle of phase coherency achieved by mounting a small-diameter element very near a boundary, thus eliminating comb filtering in the audible spectrum. The microphone will exhibit excellent off-axis response and gain-before-feedback.

A 15-foot (4.6-m), two-conductor shielded cable with TA3F and A3M connectors shall be supplied with the microphone. As an option, the microphone may be obtained with a bottom-mounted stereo phone plug (model PCC-130SPP, no cable provided).

Nominal sensitivity shall be 22 mV/Pa. Maximum SPL shall be 120 dB SPL for 3% THD. Equivalent noise shall be 22 dBA nominal. Frequency response shall be 50 Hz to 20,000 Hz with a uniform off-axis response, over 20 dB down at the rear null.

The Crown PCC-130 is specified.

Warranty

Crown professional microphones are guaranteed against malfunction for a period of three years from date of original purchase. See enclosed warranty sheet for additional information.

Service

If the microphone does not function properly, check that it is aimed correctly and is configured and connected as described in this data sheet. If there is hum or no signal, first repair or replace the cable. If the microphone capsule is defective, order a replacement PCC-130 mic capsule from Crown (part no. M43197-9) or return the microphone in its original packaging to: **Crown Factory Service, 1718 West Mishawaka Road, Elkhart, IN 46517-9439**. A Service Return Authorization (SRA) is required for product being sent to the factory for service. An SRA can be completed on line at www.crownaudio.com/support/factserv.htm. For further assistance or technical support call **800-342-6939**.



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